

# Innovative Communication Approaches to Link Traditional Knowledge and Western Science

## The Ashkui Project

Geoff Howell and Alex T. Bielak, Environment Canada

### Special People

The project team includes a wide cross-section of skills and backgrounds from the social and natural sciences and from the Innu community at large (children to elders). The basic operating principle of the partnership is respect for nature, people, culture, ideas and opinions.



The research team and Innu elders talk about the ecology of ashkui during the in-country meeting on Grand Lake.



Innu co-researcher Jack Selma collecting water samples for chemical analysis at "ashkui" as caribou move along Wuchusk Lake.



Collecting sediment cores from Minipi Lake as part of a Pan-Arctic study on historic mercury loading to northern lakes.

#### Best Practices:

- Design project based on Innu Elder Knowledge
- Have community co-researchers involved from start of project
- Provide community liaison
- Present project in the Innu language
- Guide project development from an Innu perspective
- Solicit people who value other cultures and opinions
- Attract "learners" not "lecturers"
- Maximize diversity of project team



Project partner from the Canada Center for Remote Sensing shares satellite images with young Innu Meagan Michel at in-country meeting at Seal Lake.

### Special Places

The project operates on both local and regional scales. Thirteen ashkui sites, originally selected by Innu elders, comprise the site research network. These sites are situated along a 400 km north to south transect. Spatial and temporal patterns of ashkui across the entire Labrador landscape are being studied using satellite imagery.



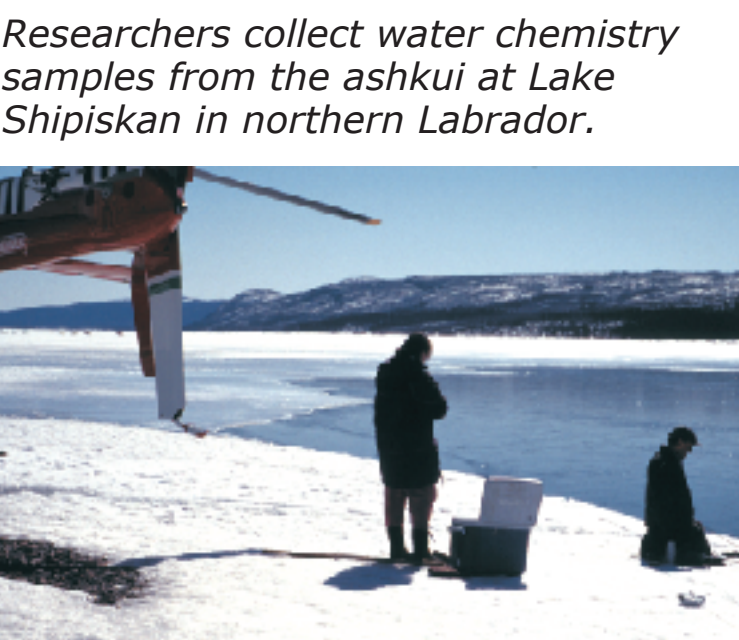
Preparing the tent floor with boughs from Balsam Fir.



Researchers conduct vegetation survey to ground-truth satellite imagery.



Innu families and Scientists arrive at Seal Lake for a three day, spring In-country meeting. This meeting gave rise to a new study looking at climate change impacts on ashkui over the past 100 years.

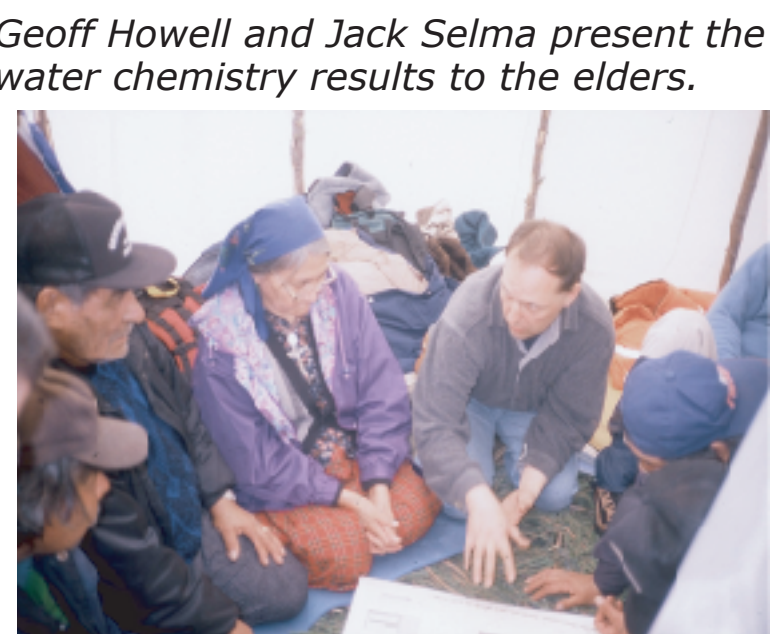


Smoking Lake Trout at the Grand Lake In-country meeting.



#### Best Practices:

- Place can cement the project in the Innu community
- Innu camp meetings are superior to "boardroom" meetings
- The Innu are more receptive to science when in-country
- Innu knowledge and western science are treated equally
- Western scientists learn about practical landscape values
- Camps are holistic not reductionist
- Relationships are built on many levels
- De-emphasize technology - promote communication



In the tent at Seal Lake.

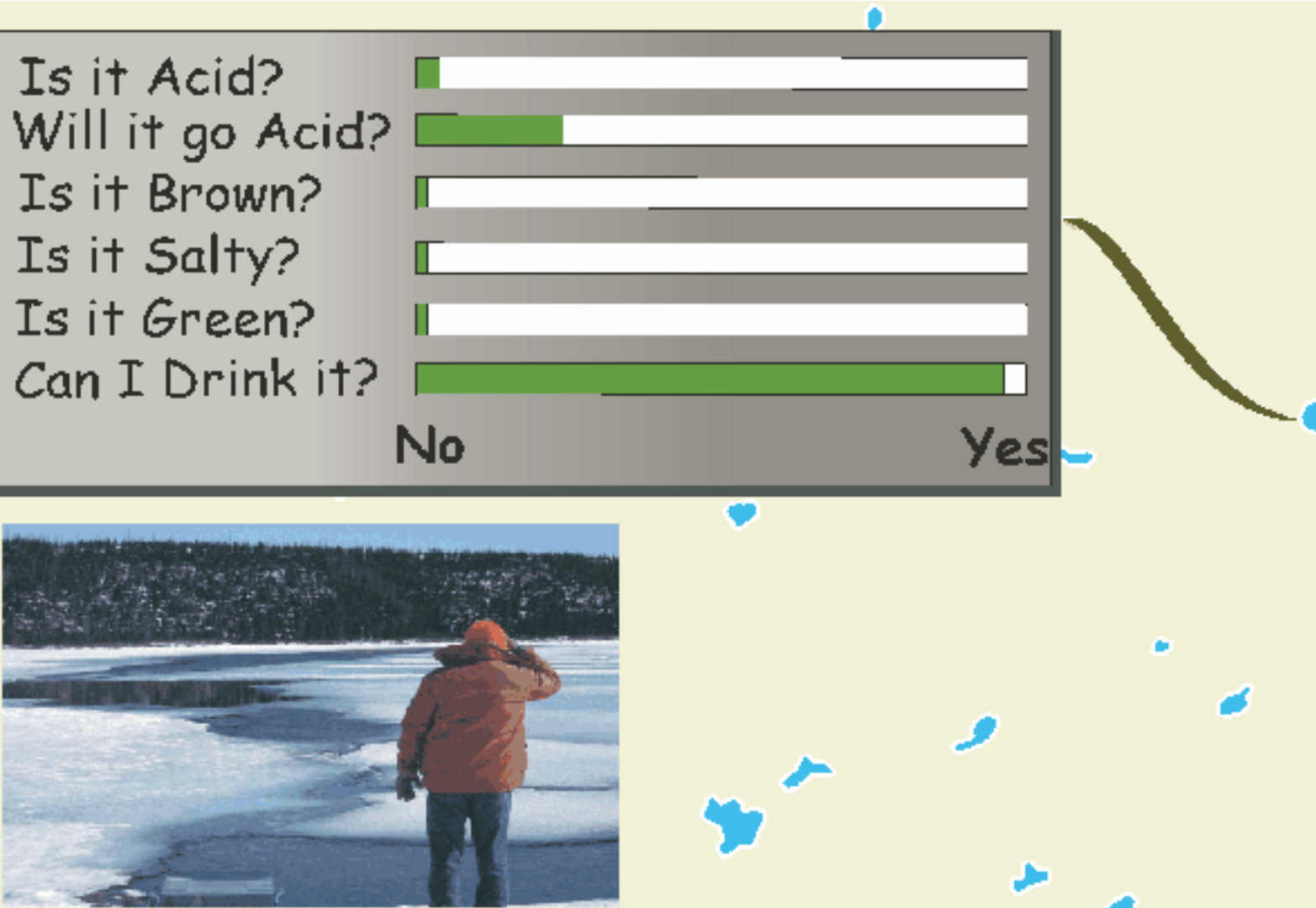
### Special Products

Provide value back to the community through products such as educational Cd-Roms that highlight Innu and scientific knowledge of ashkui. The Cd-Rom pictured below will be used in the Innu school system and is currently being translated into the Innu language by Innu teachers.

Main Menu Screen from the Educational Ashkui Cd-Rom

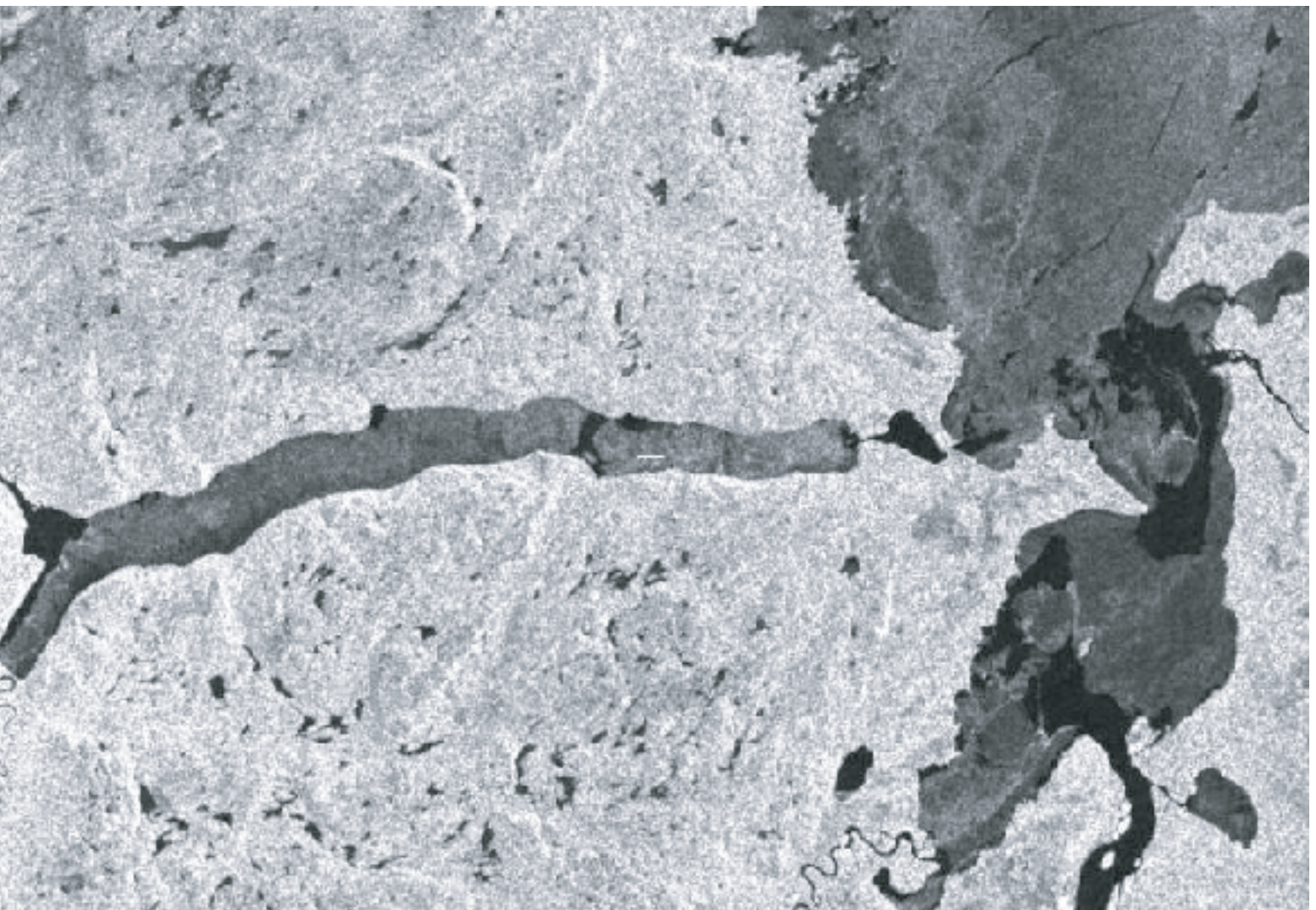


A Portion of the Ashkui Water Chemistry Poster



Make products relevant. Maps, satellite images and photographs and other visual media are being tested as tools for collection and dissemination of Innu knowledge. RADARSAT images are being used to develop spring ice risk maps for use by the Innu.

Radarsat Image of Grand Lake showing Ashkui Formation



### Abstract

Over centuries of close connection with the landscape, the aboriginal peoples of Labrador have gained a special knowledge of the ecosystem upon which their livelihood and culture depends. Recent work in Labrador is focused on a Cultural Landscape Unit (CLU) approach which uses a landscape feature identified by Innu Elders to orient interdisciplinary research in Labrador.

In general terms, "ashkui" are areas of early or permanently open water, many of which are an especially important resource to the Innu in the spring. Co-researchers from the Innu Nation are helping natural and social scientists investigate these sites and translate project findings to members of the Innu community.

By working from Innu defined landscape units, local knowledge becomes a basic step towards an overall understanding of the environment. This allows for determinations of environmental change to be made more sensibly and equitably in the local context.

The effective sharing of knowledge across cultures is an essential component of this project. Our communication toolkit is made up of three key elements: Special People, Special Places and Special Products.

### Budget

Environment Canada dedicates approximately 180K per year in salary and an additional 75K in operational project resources. Project partners and external funding agencies contribute up to 250K per annum in project resources excluding their own salary costs.

The very nature of this project is expensive. The Innu knowledge interview work is time consuming and as such requires significant salary resources. Scientific research in remote northern ecosystems also carries major logistic overhead for helicopter charter and field crew expenses.

### Research and Evaluation

The first year of the project concentrated on orientation, project development and building a relationship with the Innu. The actual project design was developed by the Innu and is based on landscape elements valued by their own culture. Three project teams have been developed; 1) A site research team, 2) a landscape team and 3) an Innu knowledge team. All aspects of the project are grounded within the community and serve to enhance capacity within the Innu Nation.

The program is still in the early stages, and evaluation presently consists of input from the community and others. This feedback has been very positive, the project is gaining considerable attention and recognition for its innovative approach and a number of elements of the project have been adopted by other northern research projects. Evaluation of progress also occurs annually during formal internal project planning sessions and other scientific review fora such as the Northern Ecosystem National meeting. These evaluation fora all include review by external peers.

The Innu Nation have taken ownership of the Ashkui Project and thus all aspects of the work are well supported by the community. During the past year, the Innu Nation has provided an Ashkui office in the community of Sheshatshui which has raised the public profile of the project.

All products are developed cooperatively with the Innu Nation and must be approved by the Nation prior to release. The product line is highly varied and includes project newsletters, multi-media applications, Innu school teaching products, posters, in-country sessions, web sites and a variety of reports and publications. Copies of all photographs, interviews and videos are provided back to the community.

### Project Partners



A T L A N T I C C A N A D A

Contact: Geoff Howell, 45 Alderney Drive, Dartmouth, Nova Scotia, Canada, B2Y 2N6  
Phone: (902)426-4196 Fax: (902)426-4457 E-Mail: Geoff.Howell@ec.gc.ca



Environment  
Canada

Environnement  
Canada

Canada